

University of California Retirement Plan

Actuarial Valuation Report as of July 1, 2003

For Lawrence Berkeley National Laboratory

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Introduction

This addendum report presents the results for Lawrence Berkeley National Laboratory (LBNL) of the July 1, 2003 actuarial valuation of the University of California Retirement Plan (UCRP). Results from the prior valuation are shown for comparison. The report is published solely for the purpose of complying with the requirements of Modification No. M325 Supplemental Agreement to Contract No. DE-AC03-76SF00098, Clause 3.14. The report is based on the procedures specified in Modification No. M325. The addendum report should be read in conjunction with the annual actuarial valuation report for the full UCRP provided to the Regents in late 2003.

Contributions

The DOE has agreed to fund the employer cost of UCRP at the contribution rates established from time to time by the Regents, as long as the contributions do not exceed the full funding limit defined in the Internal Revenue Code, Section 412. The 2003 recommended contribution of 0% of payroll is due to the effect of the full funding provision of the Regents' contribution policy. LBNL has made no contributions to UCRP since November 1990.

Highlights

	July 1, 2003	July 1, 2002
Recommended Contribution (as a percentage of pay)		
Non-safety	0.0%	0.0%
Safety	0.0	0.0
Total	0.0	0.0
Market Value of Assets Allocated to LBNL		
	\$ 1,261,453,189	\$ 1,225,659,585
Funded Status (Contribution Basis)		
Actuarial value of assets [AV]	\$ 1,479,358,587	\$ 1,482,114,980
Actuarial accrued liability [AAL]	1,066,846,206	995,760,438
AAL funded percentage [AV + AAL]	139%	149%
Funded Status (Full Funding Basis)*		
Actuarial accrued liability (including normal cost)	\$ 1,103,973,484	\$ 1,031,223,953
150% of current liability (including normal cost)	1,325,973,368	1,222,375,970
Full funding liability (lesser of above liabilities)	1,103,973,484	1,031,223,953
Assets (lesser of actuarial value and market value)	1,261,453,189	1,225,659,585
Surplus/(deficit)	157,479,705	194,435,632

*Shown for illustration only. Recommended contribution reflects the full funding status of UCRP as a whole.

Major Events Since Prior Valuation

Assets

The University of California Retirement Plan investment portfolio consists of approximately 65% equities and 35% fixed income investments. During the 2002 plan year, the fund achieved a 5.6% investment return on market value, while the capital markets performed as follows:

S&P 500 composite (including dividends)	0.25%
Lehman Brothers government/corporate/Yankee bond index	13.15%
Return on cash (three-month Treasury bill)	1.41%

Demographic Experience

The LBNL portion of the University of California Retirement Plan had 2,805 active members as of July 1, 2003, an increase of 0.5% from 2002. Covered payroll for active members increased 4.8% from 2002 to 2003, to a level of \$237.8 million.

The LBNL portion of the plan has 1,068 members currently receiving benefits, an increase of 7.0% over 2002. Total annual benefits in pay status is \$26.5 million, an increase of 14.0% from 2002. In addition, 457 terminated vested members are entitled to future benefits.

Future Expectations

Although no contribution to UCRP is called for as a result of this valuation, it is not reasonable to expect the plan to maintain a surplus indefinitely. Forecasts of assets and liabilities are performed, as needed, to ensure that financial data are available to provide advance information regarding contribution requirements.

Major Plan Changes (System-wide)

Members who were active as of April 1, 2003 received a Capital Accumulation Payment (CAP) in the amount of 5% of the prior year's actual pay. The CAP was allocated in May 2003. This lump sum CAP is credited with 7.5% interest per year and is payable upon termination, retirement, or death.

Recommended Contributions

Beginning with the 1990 plan year, the Regents adopted a full funding policy. Under that policy, the University will suspend contributions when the smaller of market value or actuarial value of plan assets exceeds the lesser of:

- ▶ the actuarial accrued liability (including normal cost), and
- ▶ 150% of the estimated current liability (including normal cost).

University contributions have been suspended since November 1990.

Funded Status

The funded status is measured by comparing the actuarial value of assets with the actuarial accrued liability. The actuarial value of assets is a smoothed value that recognizes investment gains and losses over time. The actuarial accrued liability is the funding target on which the employer contribution limits are based. As the funded percentage for a plan approaches or exceeds 100%, employer contributions to the plan will be restricted in accordance with the funding policy.

The funded percentage of LBNL's portion of the plan (actuarial value of assets divided by actuarial accrued liability) is 139% as of July 1, 2003. This percentage is based on an actuarial value of assets of \$1.48 billion and an actuarial accrued liability of \$1.07 billion.

Impact of Major Events

Due to the impact of the new CAP and poor investment performance over the last three years, the funded percentage decreased to 139% in 2003 compared to 149% in 2002.

History of Contribution Funded Status

<u>Year</u>	<u>Actuarial Accrued Liability</u>	<u>Actuarial Value of Assets</u>	<u>Funded Percentage</u>
2003	\$ 1,066,846,206	\$ 1,479,358,587	139%
2002	995,760,438	1,482,114,980	149
2001	801,686,325	1,437,778,405	179
2000	702,308,269	1,311,837,132	187
1999	643,705,273	1,137,255,778	177

Assumptions

Recommended contributions are based on three key economic assumptions:

	June 30, 2003	June 30, 2002
Discount rate	7.50%	7.50%
Average salary increase rate	5.40%	5.40%
Inflation	4.00%	4.00%

Actuarial Certification

The consulting actuaries are members of the Society of Actuaries and other professional actuarial organizations and meet their "General Qualification Standard for Prescribed Statements of Actuarial Opinions" relating to pension plans.

In preparing the results presented in this report, we have relied upon information provided to us regarding plan provisions, plan participants, and plan assets. While the scope of our engagement did not call for us to perform an audit or independent verification of this information, we have reviewed this information for reasonableness but have not audited it. The accuracy of the results presented in this report is dependent upon the accuracy and completeness of the underlying information.

The actuarial assumptions and the accounting policies and methods employed in the development of the pension cost have been selected by the plan sponsor, with the concurrence of Towers Perrin. This valuation process complies with GASB requirements.

The results shown in this report are reasonable actuarial results. However, a different set of results could also be considered reasonable actuarial results, since the Actuarial Standards of Practice describe a "best-estimate range" for each assumption, rather than a single best-estimate value. Thus, reasonable results differing from those presented in this report could have been developed by selecting different points within the best-estimate ranges for various assumptions.

The information contained in this report was prepared for the internal use of the University of California and its auditors in connection with our actuarial valuation of the pension plan. It is not intended nor necessarily suitable for other purposes.



Leslie P. Finertie, F.S.A., E.A.



Roger Beiles, F.S.A., E.A.

Towers Perrin

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Asset Values

Market Value of Assets

Market value as of June 30, 2002	\$ 1,225,659,585
Regents' contributions	0
Member contributions	107,547
Benefit payments	(31,063,131)
Administrative cost	(1,005,041)
Investment return	<u>67,754,229</u>
Market value as of June 30, 2003	\$ 1,261,453,189

Actuarial Value of Assets Approximation

Total UCRP market value as of June 30, 2003	\$ 35,326,812,000
Market value allocated to LBNL as of June 30, 2003	1,261,453,189
Ratio of LBNL allocation to total	0.035708
Total UCRP actuarial value as of June 30, 2003	41,429,332,000
Multiplied by market value ratio	<u>0.035708</u>
Actuarial value allocated to LBNL as of June 30, 2003	\$ 1,479,358,587

Components of Change in Market Value

Regents' Contributions

▶ Regular contributions	\$	0
▶ Other contributions		<u>0</u>
▶ Total contributions	\$	0

Member Contributions

▶ Regular contributions	\$	103,192
▶ Service buyback contributions		<u>4,355</u>
▶ Total contributions	\$	107,547

Benefit Payments

Payments to retired members and beneficiaries of deceased retired members	\$	18,795,899
Payments to survivors of deceased active members		733,689
Payments to disabled members and beneficiaries		934,315
Cost-of-living adjustment payments		3,938,682
Lump sum death benefit payments		163,750
Refund of contributions and interest to terminating members and CAP to retired and terminating members		1,749,119
Lump sum payments on retirement		<u>4,747,677</u>
Total benefit payments	\$	31,063,131

Retirement, disability, survivor and COLA payments are made on a regular monthly basis. Death benefit, refund, CAP and lump sum payments are made on an event basis.

Administrative Cost

Total UCRP administrative cost for the defined benefit plan	\$ 28,230,000
Total UCRP market value of assets at June 30, 2002	34,441,805,000
Administrative cost as a percent of assets	0.0820%
Market value allocated to LBNL as of June 30, 2002	1,225,659,585
Multiplied by administrative cost ratio	<u>.000820</u>
Administrative cost allocated to LBNL	\$ 1,005,041

Administrative cost is allocated in proportion to the market value of assets at the beginning of the year as specified by Modification No. M325.

Administrative Cost

Annualized compound total return for UCRP	5.6%
Investment return allocated to LBNL	\$ 67,754,229

The annualized compound total return for UCRP is applied to the market value of assets at June 30, 2002 and to The Regents contributions, member contributions, benefit payments and administrative cost assuming all payments are made in the middle of the plan year.

Actuarial Liabilities

	July 1, 2003	July 1, 2002
Actuarial Accrued Liability		
Members in pay status:		
‣ Retirees	\$ 276,550,449	\$ 237,377,895
‣ Beneficiaries	11,923,096	10,737,509
‣ Disableds	14,121,093	13,385,255
‣ Survivors	<u>11,893,289</u>	<u>11,980,325</u>
‣ Total in pay status	\$ 314,487,927	\$ 273,480,984
Active members:		
‣ Nonsafety	\$ 701,601,304	\$ 670,942,142
‣ Safety	<u>0</u>	<u>5,602,051</u>
‣ Total actives	\$ 701,601,304	\$ 676,544,193
Terminated members:		
‣ Inactive (vested)	\$ 50,403,715	\$ 45,576,363
‣ Others	<u>353,260</u>	<u>158,898</u>
‣ Total terminated	\$ 50,756,975	\$ 45,735,261
Total actuarial accrued liability	\$ 1,066,846,206	\$ 995,760,438
Current Liability		
Members in pay status	\$ 314,487,927	\$ 273,480,984
Active members	473,058,290	451,348,553
Terminated members	<u>50,756,975</u>	<u>45,735,261</u>
Total current liability	\$ 838,303,192	\$ 770,564,798
Actuarial Present Value of Projected Benefits		
Members in pay status	\$ 314,487,927	\$ 273,480,984
Active members	1,010,164,936	970,548,672
Terminated members	<u>50,756,975</u>	<u>45,735,261</u>
Total	\$ 1,375,409,838	\$ 1,289,764,917

Funded Status

	July 1, 2003	July 1, 2002
Funded Status (Contribution Basis)		
Actuarial accrued liability (AAL)	\$ 1,066,846,206	\$ 995,760,438
Actuarial value of assets	<u>1,479,358,587</u>	<u>1,482,114,980</u>
Unfunded actuarial liability (surplus)	\$ (412,512,381)	\$ (486,354,542)
AAL funded percentage	138.7%	148.8%
Funded Status (Full Funding Basis)		
Actuarial accrued liability (including normal cost)	\$ 1,103,973,484	\$ 1,031,223,953
150% of current liability (including normal cost)	1,325,973,368	1,222,375,970
Full funding liability (lesser of above liabilities)	1,103,973,484	1,031,223,953
Assets (lesser of actuarial value, market value)	1,261,453,189	1,225,659,585
Surplus/(deficit)	157,479,705	194,435,632

Actuarial Assumptions and Methods

Economic Assumptions

Investment return 7.50%

Annual rates of increase in:

- ▶ Salaries
 - inflation component 4.00%
 - merit and promotion component See Table 1
- ▶ Consumer Price Index 4.00%

Demographic Assumptions

Mortality	1983 Group Annuity Mortality Table, set back two years. See Table 2.
Termination	Rates varying by age, service, gender, and employment classification; based on plan experience. See Tables 3A through 3C.
Disability	Rates varying by age, service and gender; based on plan experience. See Table 4.
Disabled mortality	1987 Group Long-Term Disability Table (composite select and ultimate rates). See Table 5.
Retirement	Rates varying by age and employment classification for active members. See Table 6. Vested terminated members are expected to retire at age 50.
Form of payment	Life annuity for single members; 25% contingent annuity for members with Social Security in a relationship for at least one year; 50% contingent annuity for members without Social Security in a relationship for at least one year; 50% contingent annuity for Safety members in a relationship for at least one year.
Percentage with eligible dependents	Percentages varying by age and gender. See Table 7.

Dependent ages	Members assumed to have opposite sex partner with females three years younger than males.
Number of dependents	Numbers varying by age and gender. See Table 8.
Refund probability	Probability of electing a refund upon termination is zero if accumulated contributions are zero or if hire date is July 1, 1993 or later. Otherwise probability varies by age and service. See Table 9.
Future service for part-time employees	Assume full-time service for all future years.
Entry age	Age on birthday nearest July 1 following employment.
Administrative expenses	0.5% of payroll, added to normal cost.

Actuarial Methods

Normal cost and actuarial accrued liability	Entry age normal.
Actuarial value of assets	Adjusted market value method: The market value on the valuation date less the following percentage of the prior years' investment gains and losses: <ul style="list-style-type: none"> ▶ 80% of the prior year ▶ 60% of the second prior year ▶ 40% of the third prior year ▶ 20% of the fourth prior year. For assets allocated to LBNL, this is approximated as the total UCRP actuarial value multiplied by the ratio of market value of LBNL allocated assets to the total UCRP market value.

Approximations

Guaranteed survivor and disability benefits	Liability and normal cost for guaranteed survivor and disability benefits for members who elected Social Security was estimated as 10% of their basic liability and normal cost.
Sick leave	Service has been increased by 0.2% for faculty, 1.4% for staff, and 2.5% for safety members to account for unused sick leave.

Benefits Not Valued

All benefits are valued.

Sources of Data

Asset data

Provided by the University, used without audit.

Member data

Census data provided by the University:

- ▶ Members and beneficiaries in receipt of benefits (not active). Data as of July 1, 2003
- ▶ Members not in receipt of benefits (actives). Data as of June 30, 2003.

Average or reasonable data used where data was incomplete. Data was adjusted as follows:

- ▶ Active and not active censuses compared; duplicate records removed from active census
- ▶ Full-time earnings for active members adjusted to be within assumed ranges:

Management & Executive	\$55,000 -- \$500,000
Faculty	\$29,000 -- \$400,000
NonFaculty Academic	\$31,000 -- \$200,000
Staff & Professional	\$25,000 -- \$110,000
Safety	\$35,000 -- \$110,000

- ▶ If reported credit service is unreasonable, it is replaced with a calculated amount using hire date and participation date as follows:

Noncoordinated members: assumed hired before April 1, 1976

Members with Plan 02 balances: assumed hired before July 1, 1971

Staff members: assumed joined the plan after June 30, 1961.

- ▶ Members with missing birth dates assumed to be age 44 on valuation date.

The data adjustments do not have a significant impact on valuation results.

Table 1

Salary Scale**Merit and Promotional Salary Increases**

Age	Annual Increase	Ratio: Earnings at Retirement/ Current Earnings	Age	Annual Increase	Ratio: Earnings at Retirement/ Current Earnings
20	2.5%	2.052	50	1.2%	1.187
21	2.5	2.002	51	1.2	1.173
22	2.5	1.953	52	1.2	1.159
23	2.5	1.905	53	1.1	1.145
24	2.5	1.859	54	1.1	1.133
25	2.5	1.814	55	1.1	1.120
26	2.5	1.769	56	1.1	1.108
27	2.4	1.726	57	1.0	1.096
28	2.3	1.686	58	1.0	1.085
29	2.2	1.648	59	0.9	1.074
30	2.1	1.612	60	0.9	1.065
31	2.0	1.579	61	0.8	1.055
32	1.9	1.548	62	0.8	1.047
33	1.8	1.519	63	0.7	1.039
34	1.7	1.493	64	0.6	1.031
35	1.7	1.468	65	0.5	1.025
36	1.6	1.443	66	0.5	1.020
37	1.6	1.420	67	0.5	1.015
38	1.5	1.398	68	0.5	1.010
39	1.5	1.377	69	0.5	1.005
40	1.5	1.357	70	0.0	1.000
41	1.4	1.337			
42	1.4	1.319			
43	1.4	1.300			
44	1.4	1.282			
45	1.3	1.265			
46	1.3	1.248			
47	1.3	1.232			
48	1.3	1.217			
49	1.2	1.201			

Table 2

Mortality Rates**Number of Deaths per 1,000 Members**

Age	Male Rate	Female Rate	Age	Male Rate	Female Rate	Age	Male Rate	Female Rate
20	0.353	0.168	50	3.138	1.366	80	60.678	34.459
21	0.365	0.179	51	3.513	1.505	81	67.125	38.549
22	0.377	0.189	52	3.909	1.647	82	74.070	42.945
23	0.392	0.201	53	4.324	1.793	83	81.484	47.655
24	0.408	0.212	54	4.755	1.949	84	89.320	52.691
25	0.424	0.225	55	5.200	2.120	85	97.525	58.071
26	0.444	0.239	56	5.660	2.315	86	106.047	63.807
27	0.464	0.253	57	6.131	2.541	87	114.836	69.918
28	0.488	0.268	58	6.618	2.803	88	124.170	76.570
29	0.513	0.284	59	7.139	3.103	89	133.870	83.870
30	0.542	0.302	60	7.719	3.443	90	144.073	91.935
31	0.572	0.320	61	8.384	3.821	91	154.859	101.354
32	0.607	0.342	62	9.158	4.241	92	166.307	111.750
33	0.645	0.364	63	10.064	4.703	93	178.214	123.076
34	0.687	0.388	64	11.133	5.210	94	190.460	135.630
35	0.734	0.414	65	12.391	5.769	95	203.007	149.577
36	0.785	0.443	66	13.868	6.386	96	217.904	165.103
37	0.860	0.476	67	15.592	7.064	97	234.086	182.419
38	0.907	0.502	68	17.579	7.817	98	248.436	201.757
39	0.966	0.536	69	19.804	8.681	99	263.954	222.044
40	1.039	0.573	70	22.229	9.702	100	280.803	243.899
41	1.128	0.617	71	24.817	10.922	101	299.154	268.185
42	1.238	0.665	72	27.530	12.385	102	319.185	295.187
43	1.370	0.716	73	30.354	14.128	103	341.086	325.225
44	1.527	0.775	74	33.370	16.160	104	365.052	358.897
45	1.715	0.842	75	36.680	18.481	105	393.102	395.843
46	1.932	0.919	76	40.388	21.092	106	427.255	438.360
47	2.183	1.010	77	44.597	23.992	107	469.531	487.816
48	2.471	1.117	78	49.388	27.185	108	521.945	545.886
49	2.790	1.237	79	54.758	30.672	109	586.518	614.309
						110	665.268	694.885
						111	760.215	789.474
						112	1,000.000	1,000.000

Table 3A

Withdrawal Rates – Faculty

Number of Terminations per 1,000 Active Members

Age	Years of Service			
	0-1	1-2	2-3	3+
20	240	220	210	210
21	240	220	210	210
22	240	220	210	210
23	240	220	210	210
24	240	220	210	210
25	240	220	210	210
26	230	210	210	190
27	230	210	200	170
28	230	210	200	150
29	230	210	190	150
30	230	200	180	130
31	230	200	180	110
32	230	200	170	110
33	220	200	170	100
34	220	190	170	90
35	220	190	160	80
36	210	190	160	70
37	210	190	150	60
38	210	180	140	60
39	200	180	140	60
40	200	180	130	50
41	200	180	130	50
42	200	180	130	40
43	200	180	130	40
44	200	180	120	30
45	190	180	120	30
46	190	170	120	20
47	190	170	110	20
48	180	170	110	20
49	180	170	100	20
50	180	160	100	20
51	170	160	100	20
52	170	160	90	20
53	170	160	90	20
54	170	160	90	20

Table 3B

Withdrawal Rates – Staff

Number of Terminations per 1,000 Active Members

Age	Male – Years of Service				Female – Years of Service			
	0-1	1-2	2-3	3+	0-1	1-2	2-3	3+
20	270	240	210	180	270	240	210	180
21	270	240	210	180	270	240	210	180
22	270	240	210	180	270	240	210	180
23	270	240	210	180	270	240	210	180
24	270	240	210	180	270	240	210	180
25	270	240	210	180	270	240	210	180
26	270	230	200	160	270	230	200	160
27	270	230	190	140	270	230	190	150
28	270	230	190	120	270	230	190	140
29	270	220	180	110	270	220	180	130
30	260	220	170	100	260	220	170	110
31	260	210	170	90	260	210	170	100
32	260	210	160	80	260	210	160	90
33	250	200	160	70	250	200	160	80
34	250	200	150	60	250	200	150	80
35	250	200	150	60	250	200	150	70
36	250	190	140	60	250	190	140	70
37	250	190	140	50	250	190	140	60
38	250	190	140	50	250	190	140	60
39	250	180	130	50	250	180	130	60
40	250	180	130	40	250	180	130	60
41	250	180	120	40	250	180	120	60
42	240	180	120	30	240	180	120	60
43	240	170	120	30	240	170	120	60
44	240	170	110	30	240	170	110	60
45	240	160	110	30	240	160	110	60
46	240	160	110	30	240	160	110	60
47	230	160	100	30	230	160	100	60
48	230	150	100	30	230	150	100	60
49	230	150	100	30	230	150	100	60
50	230	150	100	20	230	150	100	50
51	220	150	90	20	220	150	90	50
52	220	140	90	20	220	140	90	50
53	220	140	90	20	220	140	90	40
54	220	140	90	20	220	140	90	40

Table 3C

Withdrawal – Safety

Number of Terminations per 1,000 Active Members

Age	Male – Years of Service				Female – Years of Service			
	0-1	1-2	2-3	3+	0-1	1-2	2-3	3+
20	250	250	250	250	250	250	250	250
21	250	250	250	240	250	250	250	240
22	250	250	240	230	250	250	240	230
23	250	250	230	220	250	250	230	220
24	250	250	220	200	250	250	220	200
25	200	200	200	180	200	200	190	180
26	190	190	180	160	200	200	180	160
27	180	180	160	140	200	200	170	150
28	170	170	150	120	200	200	160	140
29	160	160	150	110	200	200	160	130
30	150	150	150	100	200	200	160	110
31	150	150	150	90	200	200	160	100
32	150	150	150	80	200	200	160	90
33	150	150	150	70	200	200	160	80
34	150	150	150	60	200	200	160	80
35	100	100	100	60	190	190	150	70
36	100	100	100	60	180	180	140	70
37	100	100	100	50	180	180	130	60
38	100	100	100	50	170	170	120	60
39	100	100	100	50	170	170	110	60
40	100	100	100	40	160	160	100	60
41	100	100	100	40	160	160	100	60
42	100	100	100	30	150	150	100	60
43	100	100	100	30	150	150	100	60
44	100	100	100	30	140	140	100	60
45	100	100	100	30	140	140	100	60
46	100	100	100	30	130	130	100	60
47	100	100	100	30	120	120	100	60
48	100	100	100	30	120	120	100	60
49	100	100	100	30	110	110	100	60
50	100	100	100	20	100	100	100	50

Table 4

Disability Rates

Number of Disablements per 1,000 Active Members

Age	Male	Female	Age	Male	Female
20	2.0	0.5	45	2.9	3.4
21	2.0	0.5	46	3.0	3.7
22	2.0	0.5	47	3.1	4.0
23	2.0	0.5	48	3.3	4.4
24	2.0	0.5	49	3.4	4.8
25	2.0	0.5	50	3.6	5.2
26	2.0	0.5	51	3.7	5.6
27	2.0	0.5	52	3.9	6.0
28	2.0	0.5	53	4.1	6.4
29	2.0	0.5	54	4.4	6.9
30	2.0	0.5	55	4.7	7.5
31	2.0	0.5	56	5.0	8.0
32	2.0	0.5	57	5.4	8.6
33	2.1	0.6	58	5.9	9.2
34	2.1	0.7	59	6.5	9.9
35	2.2	0.8	60	7.2	10.6
36	2.2	0.9	61	8.0	11.3
37	2.3	1.1	62	8.9	12.0
38	2.3	1.3	63	9.9	12.7
39	2.4	1.6	64	10.9	13.4
40	2.5	1.9	65	12.0	14.1
41	2.6	2.2	66	13.1	14.8
42	2.7	2.5	67	14.2	15.5
43	2.8	2.8	68	15.3	16.2
44	2.8	3.1	69	16.4	16.9
			70	17.5	17.6

Table 5

Mortality Rates – Disabled Members

Number of Deaths per 1,000 Disabled Members

Age	Male	Female	Age	Male	Female	Age	Male	Female
20	196.0	167.0	50	33.4	33.4	80	122.1	122.1
21	196.0	167.0	51	34.2	34.2	81	131.4	131.4
22	196.0	167.0	52	35.0	35.0	82	141.6	141.6
23	196.0	167.0	53	35.5	35.5	83	152.4	152.4
24	196.0	167.0	54	35.7	35.7	84	164.1	164.1
25	181.8	152.7	55	36.0	36.0	85	176.6	176.6
26	167.3	138.3	56	36.3	36.3	86	189.9	189.9
27	152.7	123.9	57	36.6	36.6	87	204.1	204.1
28	137.9	109.3	58	36.9	36.9	88	219.2	219.2
29	122.8	94.7	59	37.4	37.4	89	235.2	235.2
30	114.9	87.2	60	37.7	37.7	90	252.0	252.0
31	107.0	79.7	61	38.2	38.2	91	269.7	269.7
32	99.2	72.5	62	38.6	38.6	92	288.3	288.3
33	91.8	65.6	63	39.7	39.7	93	307.6	307.6
34	84.6	58.9	64	41.4	41.4	94	327.7	327.7
35	78.0	53.8	65	43.2	43.2	95	348.4	348.4
36	71.8	49.1	66	46.0	46.0	96	369.6	369.6
37	66.1	45.5	67	48.9	48.9	97	391.3	391.3
38	60.7	43.9	68	52.1	52.1	98	413.2	413.2
39	54.5	40.9	69	55.7	55.7	99	435.2	435.2
40	48.8	38.5	70	59.5	59.5	100	459.2	459.2
41	41.2	37.0	71	64.1	64.1	101	484.4	484.4
42	35.6	35.6	72	68.3	68.3	102	511.7	511.7
43	31.2	31.2	73	73.3	73.3	103	543.1	543.1
44	28.6	28.6	74	78.7	78.7	104	580.6	580.6
45	29.2	29.2	75	84.6	84.6	105	626.2	626.2
46	29.9	29.9	76	90.9	90.9	106	681.9	681.9
47	30.6	30.6	77	97.8	97.8	107	749.9	749.9
48	31.5	31.5	78	105.2	105.2	108	831.9	831.9
49	32.4	32.4	79	113.3	113.3	109	930.2	930.2
						110	1,000.0	1,000.0

Table 6

Retirement Rates**Number of Retirements per 1,000 Eligible Members**

Age	Faculty	Staff	Safety
50	30	80	200
51	10	50	50
52	10	50	50
53	10	50	50
54	10	50	50
55	10	50	250
56	10	50	250
57	10	50	250
58	10	50	250
59	10	50	250
60	30	100	250
61	30	120	250
62	30	250	500
63	30	200	500
64	50	200	750
65	100	350	1,000
66	70	250	1,000
67	100	250	1,000
68	100	250	1,000
69	100	300	1,000
70	1,000	1,000	1,000

Table 7

Percentage With Eligible Dependents

Percentage of Active Members Who Have Eligible Dependents

Age	Males	Females	Age	Males	Females
20	58.0%	66.5%	45	94.0%	92.5%
21	64.0	73.0	46	94.5	92.5
22	71.0	80.5	47	94.5	92.0
23	77.0	84.5	48	94.5	92.0
24	81.5	87.5	49	95.0	91.5
25	85.0	89.5	50	95.0	91.0
26	87.5	90.5	51	95.0	91.0
27	89.0	91.0	52	95.0	90.5
28	90.0	91.5	53	95.0	90.0
29	91.0	92.0	54	94.5	89.5
30	91.5	92.5	55	94.5	89.0
31	92.0	93.0	56	94.5	88.5
32	92.5	93.5	57	94.5	88.0
33	92.5	93.5	58	94.0	87.0
34	92.5	93.5	59	94.0	86.0
35	93.0	94.0	60	94.0	85.0
36	93.0	94.0	61	94.0	84.0
37	93.0	94.0	62	94.0	83.0
38	93.0	93.5	63	93.5	82.0
39	93.5	93.5	64	93.5	81.0
40	93.5	93.5	65	93.0	80.0
41	93.5	93.5	66	93.0	79.0
42	94.0	93.0	67	92.5	78.0
43	94.0	93.0	68	92.0	77.0
44	94.0	93.0	69	91.5	75.5

Table 8

Number of Dependents

Number of Dependents per Active Member With Dependents

Age	Males	Females	Age	Males	Females
20	1.0	1.0	45	3.0	2.0
21	1.2	1.4	46	2.9	1.9
22	1.5	1.8	47	2.8	1.8
23	1.6	2.0	48	2.7	1.7
24	1.7	2.2	49	2.6	1.6
25	1.8	2.3	50	2.5	1.5
26	1.9	2.5	51	2.4	1.5
27	2.0	2.7	52	2.3	1.4
28	2.1	2.9	53	2.2	1.4
29	2.2	3.0	54	2.1	1.4
30	2.3	3.2	55	2.0	1.3
31	2.4	3.3	56	1.9	1.3
32	2.5	3.5	57	1.8	1.2
33	2.7	3.4	58	1.7	1.2
34	2.9	3.3	59	1.6	1.1
35	3.0	3.1	60	1.5	1.1
36	3.1	3.0	61	1.5	1.1
37	3.2	2.9	62	1.4	1.1
38	3.3	2.8	63	1.4	1.1
39	3.4	2.6	64	1.3	1.1
40	3.5	2.5	65	1.3	1.1
41	3.4	2.4	66	1.2	1.1
42	3.3	2.3	67	1.2	1.0
43	3.2	2.2	68	1.1	1.0
44	3.1	2.1	69	1.1	1.0

Table 9

Rates of Refund

Probability of Electing a Refund Upon Termination

Age at Termination	Years of Service				
	Less Than 5	5	7	9	10 or More
35 or less	1.000	0.500	0.300	0.100	0.000
36	1.000	0.500	0.299	0.099	0.000
37	1.000	0.480	0.285	0.094	0.000
38	1.000	0.458	0.272	0.090	0.000
39	1.000	0.435	0.258	0.085	0.000
40	1.000	0.413	0.245	0.081	0.000
41	1.000	0.390	0.231	0.076	0.000
42	1.000	0.368	0.218	0.072	0.000
43	1.000	0.345	0.204	0.067	0.000
44	1.000	0.323	0.191	0.063	0.000
45	1.000	0.300	0.177	0.058	0.000
46	1.000	0.278	0.164	0.054	0.000
47	1.000	0.255	0.150	0.049	0.000
48	1.000	0.233	0.137	0.045	0.000
49	1.000	0.210	0.123	0.040	0.000
50	1.000	0.188	0.110	0.036	0.000
51	1.000	0.165	0.096	0.031	0.000
52	1.000	0.143	0.082	0.027	0.000
53	1.000	0.120	0.069	0.022	0.000
54	1.000	0.098	0.056	0.018	0.000
55	1.000	0.075	0.042	0.013	0.000
56	1.000	0.053	0.028	0.009	0.000
57	1.000	0.030	0.015	0.004	0.000
58	1.000	0.008	0.001	0.000	0.000
59 or more	1.000	0.000	0.000	0.000	0.000

Plan Provisions

Effective Date	April 24, 1954. Most recent amendments effective June 1, 2003.
Covered Employees	<p>All employees who are not members of another retirement system to which the Regents contribute, and who:</p> <ul style="list-style-type: none"> a) Are appointed to work 50% time or more for one year or longer or b) Beginning January 1, 2001 have accumulated at least 1,000 hours in a 12-month period.
Participation Date	Date of becoming a covered employee.
Definitions	
Highest average plan compensation (HAPC)	Highest average monthly full-time-equivalent base compensation rate received during any period of 36 consecutive months.
Normal retirement date (NRD)	Attainment of age 60 with five years of service credit.
Inactive member	Former UCRP member who retains right to vested benefits.
Eligible survivor:	
▶ Eligible partner	<p>Spouse or domestic partner of deceased active or disabled member in relationship for at least one year before date of death and who is:</p> <ul style="list-style-type: none"> ▶ Responsible for care of eligible child, ▶ Disabled, or ▶ Age 60 (age 50 if spouse of member without Social Security and in plan prior to October 19, 1973). <p>Spouse or domestic partner of deceased retired member in relationship at least one year before date of retirement.</p>
▶ Eligible child	<p>Child:</p> <ul style="list-style-type: none"> ▶ Under age 18, ▶ Under age 22 and full-time student, ▶ Disabled, if disability occurred prior to age 18 or age 22 if full-time student.
Eligible dependent parent	Parent of deceased active, disabled or retired member, supported 50% or more by member for one year prior to earliest of death, disablement or retirement.

Age Factor

Percentage of HAPC per year of service credit (interpolated for fractional ages):

► Nonsafety members

Age	Factor	Age	Factor
50	1.10%	56	1.94%
51	1.24	57	2.08
52	1.38	58	2.22
53	1.52	59	2.36
54	1.66	60+	2.50
55	1.80		

► Safety members

3.0% at all ages.

► Tier II members

Same as nonsafety members.

Benefit percentage

Age factor multiplied by years of service credit; not to exceed 100%.

Basic Retirement Income (BRI)

Monthly amount of retirement income payable to retired member for life.

Members without Social Security

Benefit percentage x HAPC.

Members with Social Security

Benefit percentage x HAPC in excess of \$133 per month.

Safety members

Benefit percentage x HAPC.

Retirement

Eligibility

Age 50 with five years of service credit, or age 62 regardless of service credit if membership began on or before July 1, 1989, or retirement on normal retirement date.

Monthly benefit

BRI.

Form of payment

Single life annuity.

Payment options

Full continuance to contingent annuitant;
Two thirds continuance to contingent annuitant;
One-half continuance to contingent annuitant;
One-half continuance (including postretirement survivor continuance) to surviving spouse or domestic partner (for members with Social Security only).

Lump sum cashout

May be elected in lieu of monthly retirement income.

Temporary Social Security supplement:

For members with Social Security only.

► Eligibility

Retirement before age 65.

► Benefit

Temporary annuity to age 65 equal to \$133 per month multiplied by BRI benefit percentage.

- ▶ Form of payment Single life annuity.
- ▶ Payment options None.

Disability

Eligibility Disablement after five years of service credit; safety members are eligible for duty disability without regard to service credit. Service credit continues to accrue during disabled period.

Monthly benefit:

- ▶ Members without Social Security 25% of final salary,
plus 5% of final salary per year of service credit greater than two,
total not to exceed 40% of final salary,
plus 5% of final salary for each eligible child, total not to exceed 20% of final salary.
- ▶ Members with Social Security 15% of final salary,
plus 2.5% of final salary per year of service credit greater than two,
total not to exceed 40% of final salary;
less \$106.40 per month.
- ▶ Safety members (nonduty disability) Same as for members without Social Security; includes eligible child's benefit.
- ▶ Safety members (duty disability) 50% of HAPC, or nonduty disability benefit if greater.

Form of payment Single life annuity payable until end of disability income period or retirement date if earlier.

Disability income period:

- ▶ Members disabled before November 5, 1990 To earliest of:
 - ▶ Date member is eligible to retire and retirement income equals or exceeds disability income,
 - ▶ Age 62 (Age 67 for members without Social Security),
 - ▶ Date member retires.
- ▶ Members disabled on or after November 5, 1990 If under age 65 at disablement:
 - ▶ Members with Social Security: to age 65 or five years if longer.
 - ▶ Members without Social Security: to age 67 or five years if longer.

If age 65 or older at disablement: to age 70 or 12 months if longer.

Disability income ends if member is no longer disabled.

Vested Termination

Eligibility	Five years of service credit, or age 62 regardless of service credit if membership began on or before July 1, 1989.
Monthly benefit	BRI beginning at age 50 or later, calculated using HAPC at termination date, adjusted for CPI changes (see COLA), and benefit formula in effect when benefits commence.
Form of payment	As for retirement.
Payment options	As for retirement.
Refund option	Member may elect a refund of contributions with interest, thereby forfeiting all other benefits.
Lump sum cashout	May be elected in lieu of retirement income, available only if at least age 50 with five years of service credit at date of termination.

Preretirement Survivor Income

Eligibility	Eligible survivor of deceased active or disabled member with two or more years of service credit; no service requirement for duty-related death of Safety member.
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Monthly benefit:

- ▶ Members without Social Security

Percent of final salary as follows:

Eligible Survivors	Percent	Minimum Benefit
1	25%	\$200
2	35	\$300
3	40	\$300 plus 5% of final pay
4	45	\$300 plus 10% of final pay
5+	50	\$300 plus 15% of final pay

- ▶ Members with Social Security

25% of final salary less \$106.40 per month

- ▶ Safety members (nonduty death)

As for members without Social Security.

- ▶ Safety members (duty-related death)

Percentage of HAPC as follows, but not less than benefit for nonduty death.

Eligible Survivors	Percent of HAPC
1	50.0%
2	62.5
3	70.0
4+	75.0

Death while eligible to retire:

- ▶ **Eligibility** Eligible surviving spouse or domestic partner of active, disabled or inactive member who dies while eligible to retire.
- ▶ **Benefit** Greater of benefit described above or monthly benefit to surviving spouse or domestic partner assuming member had retired on date of death and elected full continuance option with spouse or domestic partner as contingent annuitant.

Postretirement Survivor Continuance

Eligibility Eligible survivor of deceased retired member.

Benefit:

- ▶ **Members without Social Security** 50% of BRI including COLA.
- ▶ **Members with Social Security** 25% of BRI including COLA, plus 25% of Temporary Social Security Supplement (ends when member would have reached age 65).
- ▶ **Safety members** 50% of BRI including COLA.

Lump Sum Death Benefit

Eligibility Active, inactive, disabled or retired member.

Basic benefit:

- ▶ **Active members who became members before October 1, 1990** Greater of \$1,500 plus one month's final salary, or \$7,500.
- ▶ **All others** \$7,500.

Residual benefit

Refund of member contributions plus interest, reduced by a portion of benefits received (100% of retirement income, 50% preretirement survivor income or disability income) payable to beneficiary if no survivor, surviving spouse, domestic partner, or contingent annuitant.

Cost-of-Living Adjustment

COLA formula: Based on annual increase in CPI:

- ▶ **Basic** 100% of CPI increase up to 2%.
- ▶ **Supplemental** Greater of:
75% of CPI increase above 4%, or accumulated increment; maximum 4%.

Accumulated increment:
1.5% per year compounded annually starting at 7/1/86, minus actual COLA increases on or after 7/1/86 above 2% per year.

COLA applies to:

- ▶ Retired members, survivors, disabled members, and contingent annuitants receiving retirement income
Benefits in pay status one or more years on July 1.
- ▶ Inactive members
HAPC (used to calculate retirement income) adjusted for COLA up to 2% per year from separation date to retirement date; retirement income adjusted using COLA formula.
- ▶ Disabled members receiving disability income since before November 5, 1990
HAPC (used to calculate retirement income) adjusted according to COLA formula above for years from disablement to retirement date.

Capital Accumulation Provision

Eligibility	Active member on specified date; benefits immediately vested.
Allocations:	
▶ April 1, 1992	Active member 12/31/1991 through 4/1/1992: 5.0% of 1991 calendar year covered compensation.
▶ July 1, 1992	Active member on 7/1/1992: 2.5% of 1991-1992 fiscal year covered compensation.
▶ July 1, 1993	Active member on 7/1/1993: 2.5% of 1992-1993 fiscal year covered compensation.
▶ November 1, 1993, (Not applicable to LBNL employees)	Active member on 10/1/1993 and subject to 1993-1994 salary plan: 5.26% of July through October 1993 covered compensation.
▶ July 1, 1994, (Not applicable to LBNL employees)	Active member 6/1/1994 and subject to 1993-1994 salary plan: 2.67% of November 1993 through June 1994 covered compensation.
▶ May 1, 2002	Active member 4/1/2002: 3.0% of April 2001 through March 2002 covered compensation.
▶ May 1, 2003	Active member 4/1/2003: 5.0% of April 2002 through March 2003 covered compensation.
Interest credit	Regents' approved interest rate; currently 8.5% per year for pre-2002 CAPs. 7.5% for post-2001 CAPs (CAP II).
Payment	Lump sum payment upon termination, retirement or death.

Member Contributions

Members without
Social Security

3.0% of covered compensation, less \$19 per month.

Members with
Social Security

2.0% of covered compensation up to the Social Security
wage base, plus 4.0% of excess covered compensation,
minus \$19 per month.

Safety members

3.0% of covered compensation, less \$19 per month.

All member contributions are currently being redirected to the UC Defined Contribution
Plan.

Member Data

	July 1, 2003	July 1, 2002
Members in Pay Status		
Retirees:		
▶ Number	855	790
▶ Average age	68.6	68.6
▶ Annual benefit:		
— Total	\$ 23,119,200	\$ 19,969,620
— Average	UCRP - \$24,050 \$ 27,040	\$ 25,278
Beneficiaries:		
▶ Number	94	88
▶ Average age	UCRP - 74.2 74.8	74.7
▶ Annual benefit:		
— Total	\$ 1,208,088	\$ 1,112,408
— Average	UCRP - \$14,528 \$ 12,852	\$ 12,641
Disabled:		
▶ Number	57	57
▶ Average age	UCRP - 54.2 56.5	56.0
▶ Annual benefit:		
— Total	\$ 1,063,335	\$ 1,024,005
— Average	UCRP - \$15,112 \$ 18,655	\$ 17,965
Survivors:		
▶ Number	62	63
▶ Average age	UCRP - 64 65.3	65.8
▶ Annual benefit:		
— Total	\$ 1,144,272	\$ 1,160,712
— Average	\$ 18,456	\$ 18,424

	July 1, 2003	July 1, 2002
All Members in Pay Status:		
▶ Number	1,068	998
▶ Average age	68.3	68.2
▶ Annual benefit:		
— Total	\$ 26,534,895	\$ 23,266,745
— Average	\$ 24,845	\$ 23,313

Terminated Members Not in Pay Status

Terminated Vested Members:

▶ Number	457	439
▶ Annual benefit:		
— Total	\$ 3,918,318	\$ 3,633,164
— Average	UCRP-6832 \$ 8,574	\$ 8,276

Terminated Nonvested Members:

▶ Expected refund:		
— Total	\$ 353,260	\$ 158,898

Active Members

▶ Number	2,805	2,792
▶ Average age	UCRP-43.8 45.3	45.4
▶ Average service	9.2 10.5	10.7
▶ Covered pay:		
— Total	\$ 237,751,800	\$ 226,914,216
— Average	UCRP-43,731 \$ 84,760	\$ 81,273

Member Retirees as of July 1, 2003

Age at Benefit Commencement		Age at July 1, 2003										Total
		0-49	50-59	60-61	62-63	64-65	66-67	68-69	70-71	72-73	Over 73	
0-49	Number											
	Avg Benefit											
	Avg HAPC											
	Avg Service											
50-54	Number		66	33	25	13	13	1	1	1	3	156
	Avg Benefit		17,276	17,786	18,285	23,979	17,865	12,377	30,996	11,781	8,961	18,020
	Avg HAPC		58,443	47,185	50,119	48,705	39,184	23,537	57,945	15,927	17,174	50,985
	Avg Service		18.6	23.1	21.3	26.2	23.9	20.2	16.9	23.2	15.4	21.0
55-57	Number		32	10	7	24	39	15	10	8	31	176
	Avg Benefit		26,095	22,235	12,901	25,109	35,848	24,860	16,477	12,927	8,552	23,037
	Avg HAPC		62,735	68,664	48,131	52,920	55,389	55,252	47,181	37,088	23,322	49,734
	Avg Service		21.3	18.2	17.6	21.4	24.9	25.1	17.5	14.7	12.7	20.0
58-59	Number		7	18	5	4	8	38	14	5	19	118
	Avg Benefit		31,396	38,632	26,991	13,728	35,075	40,284	30,226	17,929	13,554	31,244
	Avg HAPC		54,641	72,704	60,161	61,701	55,541	57,216	52,038	48,082	28,643	54,204
	Avg Service		22.7	22.5	18.5	12.0	22.3	25.3	23.9	13.5	16.0	21.6
60-62	Number			28	34	24	14	16	35	39	39	229
	Avg Benefit			40,444	48,908	39,887	22,301	19,318	36,811	35,427	20,247	34,260
	Avg HAPC			74,674	73,097	72,292	52,514	43,480	58,546	53,865	35,252	57,657
	Avg Service			24.8	25.9	22.1	16.7	14.9	22.9	23.4	18.3	21.8
63-64	Number			3	3	8	3	3	4	15	48	84
	Avg Benefit			22,565	22,565	41,485	18,133	39,496	7,970	33,147	24,910	27,348
	Avg HAPC			45,501	45,501	69,083	56,248	76,685	48,436	59,448	40,540	48,798
	Avg Service			21.8	21.8	26.1	15.9	22.0	7.2	21.6	18.4	19.2
65-69	Number						12	7	3	2	60	84
	Avg Benefit						46,598	34,544	12,386	12,762	21,279	25,226
	Avg HAPC						80,117	76,082	41,152	40,251	47,264	53,659
	Avg Service						22.9	18.6	10.9	12.0	15.1	16.2
Over 69	Number									1	7	8
	Avg Benefit									103,557	28,267	37,678
	Avg HAPC									127,197	72,626	79,448
	Avg Service									36.1	12.3	15.3
Total	Number		105	89	74	73	89	80	67	71	207	855
	Avg Benefit		20,940	29,631	32,608	30,937	31,814	32,318	29,498	31,166	19,369	27,040
	Avg HAPC		59,485	63,525	61,309	60,343	56,063	56,081	54,098	53,087	38,617	53,313
	Avg Service		19.7	22.9	23.0	22.5	22.6	22.3	20.7	21.3	16.1	20.4

Average Ret. Age = 59.1

Average Age @ 7/1/03 = 68.6

Beneficiaries as of July 1, 2003

Age at Benefit Commencement		Age at July 1, 2003										Total
		0-49	50-59	60-61	62-63	64-65	66-67	68-69	70-71	72-73	Over 73	
0-49	Number		4	2	1		3	1				11
	Avg Benefit		18,424	5,513	6,173		5,182	2,017				9,860
	Avg HAPC		64,604	34,222	22,685		22,610	23,534				40,083
	Avg Service		21.8	11.2	13.7		14.1	6.4				15.6
50-54	Number		1	1	3		1	2	2		3	14
	Avg Benefit		28,800	19,830	18,045	13,616	16,012	9,538	12,184		7,555	14,179
	Avg HAPC		66,390	50,690	50,329	39,587	36,608	39,242	40,694		22,747	40,884
	Avg Service		20.1	25.7	30.3	22.3	20.5	17.5	15.2		11.5	19.9
55-57	Number					3	1	2	3	3	12	24
	Avg Benefit					16,612	26,043	24,420	9,144	10,577	5,239	10,281
	Avg HAPC					64,111	49,138	39,431	31,356	38,963	22,459	33,367
	Avg Service					21.0	36.5	31.9	15.6	21.1	14.8	18.8
58-59	Number						1		1	1	4	7
	Avg Benefit						13,481		27,628	10,416	6,762	11,225
	Avg HAPC						40,284		57,804	70,729	28,718	40,527
	Avg Service						14.5		31.0	9.0	9.4	13.1
60-62	Number									1	18	19
	Avg Benefit									13,170	13,146	13,147
	Avg HAPC									45,324	38,193	38,569
	Avg Service									5.9	13.2	12.9
63-64	Number										12	12
	Avg Benefit										21,431	21,431
	Avg HAPC										36,537	36,537
	Avg Service										19.1	19.1
65-69	Number										6	6
	Avg Benefit										8,716	8,716
	Avg HAPC										40,776	40,776
	Avg Service										9.2	9.2
Over 69	Number									1	1	1
	Avg Benefit									16,515	16,515	16,515
	Avg HAPC									49,129	49,129	49,129
	Avg Service									21.8	21.8	21.8
Total	Number		5	3	4	4	6	5	6	5	56	94
	Avg Benefit		20,499	10,285	15,077	15,863	11,847	13,987	13,238	11,063	12,057	12,852
	Avg HAPC		64,961	39,712	43,418	57,980	32,310	36,176	38,876	46,589	33,435	37,902
	Avg Service		21.5	16.0	26.1	21.3	19.0	21.0	18.0	15.6	14.2	16.4

Average Ret. Age = 57.4 Average Age @ 7/1/03 = 74.8

Disabled Members as of July 1, 2003

Age at Benefit Commencement	Age at July 1, 2003										Total
	0-49	50-59	60-61	62-63	64-65	66-67	68-69	70-71	72-73	Over 73	
0-49											
Number	10	14								1	25
Avg Benefit	16,080	13,632								11,050	14,508
Avg HAPC	43,471	32,966								6,802	36,121
Avg Service	11.2	11.1								6.0	10.9
50-54											
Number		13	1	3							17
Avg Benefit		18,064	25,237	25,516							19,801
Avg HAPC		49,098	59,880	52,218							50,282
Avg Service		18.0	15.6	17.3							17.8
55-57											
Number		3	2	4							9
Avg Benefit		26,976	24,665	25,112							25,634
Avg HAPC		69,647	60,834	65,509							65,849
Avg Service		19.3	19.7	13.0							16.6
58-59											
Number		1									1
Avg Benefit		25,006									25,006
Avg HAPC		65,707									65,707
Avg Service		13.2									13.2
60-62											
Number				2	1						3
Avg Benefit				22,830	32,551						26,070
Avg HAPC				63,199	82,958						69,785
Avg Service				14.4	12.0						13.6
63-64											
Number						1	1				2
Avg Benefit						8,050	22,057				15,053
Avg HAPC						27,958	50,068				39,013
Avg Service						8.6	13.1				10.9
65-69											
Number											
Avg Benefit											
Avg HAPC											
Avg Service											
Over 69											
Number											
Avg Benefit											
Avg HAPC											
Avg Service											
Total											
Number	10	31	3	9	1	1	1			1	57
Avg Benefit	16,080	17,149	24,855	24,740	32,551	8,050	22,057			11,050	18,655
Avg HAPC	43,471	44,337	60,516	60,565	82,958	27,958	50,068			6,802	47,431
Avg Service	11.2	15.0	18.3	14.8	12.0	8.6	13.1			6.0	14.1

Average Ret. Age = 49.6 Average Age @ 7/1/03 = 56.5

Survivors as of July 1, 2003

Age at Benefit Commencement		Age at July 1, 2003										Total
		0-49	50-59	60-61	62-63	64-65	66-67	68-69	70-71	72-73	Over 73	
0-49	Number	8	6		2			2			2	20
	Avg Benefit	24,243	16,309		18,486			14,997			9,998	18,938
	Avg HAPC	70,500	47,840		63,258			33,756			11,129	55,589
	Avg Service	14.4	13.8		14.1			2.8			18.8	13.8
50-54	Number		6		2	4		1			7	20
	Avg Benefit		12,582		25,670	19,987		10,938			9,009	14,039
	Avg HAPC		53,488		58,770	45,549		37,751			17,917	40,311
	Avg Service		18.1		17.0	13.2		11.4			14.7	15.6
55-57	Number		4	1					1	2	3	11
	Avg Benefit		17,812	14,930					29,730	13,649	27,544	20,531
	Avg HAPC		65,193	39,094					87,990	41,907	29,597	49,527
	Avg Service		6.5	26.3					13.2	9.7	18.7	13.4
58-59	Number					1				1		2
	Avg Benefit					38,791				20,853		29,822
	Avg HAPC					72,458				36,930		54,694
	Avg Service					29.9				24.3		27.1
60-62	Number								1		4	5
	Avg Benefit								45,626		7,885	15,433
	Avg HAPC								132,000		24,953	60,636
	Avg Service								15.0		5.4	8.6
63-64	Number						2				1	3
	Avg Benefit						53,777				6,755	38,103
	Avg HAPC						112,252				21,423	81,976
	Avg Service						25.3				10.1	20.2
65-69	Number										1	1
	Avg Benefit										7,779	7,779
	Avg HAPC										27,460	27,460
	Avg Service										12.4	12.4
Over 69	Number											
	Avg Benefit											
	Avg HAPC											
	Avg Service											
Total	Number	8	16	1	4	5	2	3	2	3	18	62
	Avg Benefit	24,243	15,287	14,930	22,078	23,748	53,777	13,644	37,678	16,050	11,765	18,456
	Avg HAPC	70,500	53,570	39,094	61,014	50,931	112,252	35,088	109,995	40,248	21,872	50,563
	Avg Service	14.4	14.1	26.3	15.5	16.6	25.3	7.1	14.1	14.6	14.0	14.8

Average Ret. Age = 51.5 Average Age @ 7/1/03 = 65.3

Active Member Data as of July 1, 2003

Age Last Birthday	Completed Years of Credited Service											Total
	0	1	2	3	4	5-9	10-19	20-29	30-39	Over 39		
15-34	118	129	107	58	47	88	4	0	0	0	551	
	59,946	61,954	67,249	67,679	71,274	74,641	70,001	0	0	0	66,035	
	27,507	51,960	59,901	59,853	64,906	66,929	61,501	0	0	0	52,860	
	855	3,099	4,692	4,693	5,118	5,350	5,096	0	0	0	3,642	
35-39	45	45	57	32	33	107	53	1	0	0	373	
	76,576	72,245	69,673	76,672	75,883	86,739	82,476	90,924	0	0	78,738	
	39,421	60,884	62,392	67,618	67,317	78,181	73,647	86,184	0	0	66,515	
	1,188	3,457	5,041	5,134	5,313	6,535	10,276	18,924	0	0	5,627	
40-44	25	29	36	32	30	88	150	21	0	0	411	
	70,860	74,044	78,630	75,212	86,773	85,475	88,541	82,656	0	0	83,450	
	34,766	67,678	70,772	71,248	81,407	79,110	79,963	77,708	0	0	74,671	
	1,030	3,658	5,632	5,630	6,611	6,444	14,079	16,006	0	0	9,071	
45-49	20	17	24	17	15	100	168	83	1	0	445	
	74,587	75,865	65,154	75,093	88,650	83,034	93,998	91,218	76,090	0	86,952	
	38,637	68,188	60,967	73,430	81,947	76,127	86,294	85,800	72,260	0	79,048	
	1,192	3,740	4,705	5,846	6,339	6,716	15,856	18,285	13,747	0	11,824	
50-54	10	16	23	22	17	55	160	123	10	0	436	
	87,853	78,597	83,157	75,366	93,589	89,758	90,097	93,809	81,603	0	89,460	
	38,876	65,154	76,733	70,685	86,819	84,680	85,417	88,465	77,613	0	83,047	
	1,040	4,079	5,794	5,749	6,771	6,855	16,595	20,165	18,668	0	14,105	
55-59	6	12	14	18	14	42	114	133	35	0	388	
	78,829	99,489	70,901	71,434	94,906	87,871	94,244	108,765	98,738	0	96,983	
	27,136	90,877	66,489	68,131	88,704	84,213	88,188	102,779	92,765	0	90,616	
	729	5,041	5,226	5,838	7,009	7,148	16,990	23,892	22,614	0	16,875	
60-64	3	3	3	5	3	20	41	52	29	4	163	
	86,686	100,789	96,693	56,768	51,402	80,993	102,622	115,096	141,887	126,073	108,723	
	49,689	96,065	92,264	54,149	48,494	73,090	94,329	109,196	135,400	120,380	101,508	
	10,612	6,116	7,404	4,404	3,923	6,059	19,961	26,860	34,617	29,178	21,860	
65-69	0	1	1	1	0	3	7	6	11	0	30	
	115,399	113,492	113,492	89,699	645	59	72,609	127,391	157,310	0	117,176	
	66,258	108,501	108,501	85,836	569	63	51,475	121,877	148,374	0	105,173	
	0	4,051	8,434	7,024	45	0	13,462	32,102	40,243	0	25,418	
Over 69	0	0	0	1	1	0	0	1	2	3	8	
	0	0	0	123,075	126,804	0	0	56,909	174,740	159,600	141,883	
	0	0	0	123,075	126,804	0	0	55,992	174,740	159,600	141,769	
	0	0	0	9,495	10,416	0	0	15,559	44,532	47,212	33,271	
Total	227	252	265	186	160	503	697	420	88	7	2,805	
	67,817	69,639	71,208	72,595	81,173	83,729	91,247	100,496	119,802	140,442	84,760	
	32,433	59,730	64,369	66,799	74,584	76,852	84,059	94,895	113,674	137,188	75,542	
	1,104	3,465	5,064	5,302	5,904	6,403	15,560	21,751	28,722	36,907	10,832	

Average Service = 10.5

Average Age = 45.3

Glossary of Actuarial Terms

Accumulated Plan Benefit

The amount of an individual's benefit (whether or not vested) as of a specified date, determined in accordance with the terms of a retirement plan and based on compensation and service credit to that date.

Actuarial Accrued Liability

The portion of the Actuarial Present Value of plan benefits and expenses allocated to years prior to the valuation date by a particular Actuarial Cost Method.

Actuarial Assumptions

Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement, and retirement; changes in compensation and Social Security benefits; rates of investment earnings and asset appreciation or depreciation; and other relevant items.

Actuarial Cost Method

A procedure for determining the Actuarial Present Value of retirement plan benefits and expenses and for developing an actuarially equivalent allocation of such value to past and future time periods, in the form of a Normal Cost and an Actuarial Accrued Liability.

Actuarial Gain or Loss

A measure of the change in value of the Actuarial Accrued Liability or plan assets resulting from experience different than that expected based upon a set of Actuarial Assumptions, as determined in accordance with a particular Actuarial Cost Method.

Actuarially Equivalent

Of equal Actuarial Present Value, determined as of a given date with each value based on the same set of Actuarial Assumptions.

Actuarial Present Value

The value of an amount or series of amounts payable or receivable at various times in the future, determined as of a specific date by the application of a particular set of Actuarial Assumptions.

Actuarial Valuation

The determination, as of a valuation date, of the Normal Cost, Actuarial Accrued Liability, Actuarial Value of Assets, and related Actuarial Present Values for a retirement plan.

Actuarial Value of Assets

The value of cash, investments and other property belonging to a retirement plan, as used by the actuary for the purpose of determining contributions to the plan. Typically a smoothed value to reduce the impact on contributions of market volatility.

Covered Payroll

The payroll of eligible active members projected for the plan year following the valuation date, based on the reported payroll for the previous plan year.

Current Liability

The actuarial present value of accumulated plan benefits.

Full Funding Limitation

A limitation on contributions imposed by the IRS on retirement plans subject to ERISA, equal to the lesser of:

- ▶ the excess, if any, of the Actuarial Accrued Liability over the Actuarial Value of Assets
- ▶ the excess, if any, of 150% of the Current Liability over the Actuarial Value of Assets.

The full funding limitation for a plan year is typically determined by projecting assets and liabilities to the end of the plan year.

Funded Status

A comparison of the plan's assets and actuarial liabilities at a particular point in time.

Normal Cost

That portion of the Actuarial Present Value of plan benefits and expenses which is allocated to the current year by the Actuarial Cost Method.

Pension Benefit Obligation

The Actuarial Present Value of all benefits attributed by the retirement benefit formula to member service rendered prior to the valuation date, taking into account anticipated future compensation levels.

Projected Benefits

Retirement plan benefits which are expected to be paid at various future times according to a particular set of Actuarial Assumptions, taking into account anticipated future compensation, future service credits, and the effect of advancement in age.

Salary Scale

An assumption as to the rate of growth of a member's compensation over his career.

Unfunded Actuarial Accrued Liability

The excess, if any, of the Actuarial Accrued Liability over the Actuarial Value of Assets.

Valuation Date

The date as of which assets, actuarial present values and actuarial liabilities are measured.

Valuation Interest Rate

An assumption as to the future rate of return on plan assets reflecting the average rate of earnings expected on the funds invested; used in calculating Actuarial Present Values; represents the time value of money.